Project Title	BNSF SPJ - Vibratory driving behavioral impact distance
Pile information (size, type, number, pile strikes, etc.)	Vibratory driving of 36-inch steel piles assumed at 175dBrms (WSDOT).

Fill in green cells: estimated sound levels and distances at which they were measured, estimated number of pile strikes per day, and transmision loss constant.

	Acoustic Metric			
_	Peak	SEL	RMS	Effective Quiet
Measured single strike level (dB)			175	150
Distance (m)			10	

Estimated number of strikes

Cumulative SEL at measured distance				
#NUM!				
	Distance (m) to threshold			
	Onset of Physical Injury Behavior			Behavior
	Peak Cumulative SEL dB**		RMS	
	dB	Fish ≥ 2 g	Fish < 2 g	dB
Transmission loss constant (15 if unknown)	206	187	183	150

<sup>\*\*</sup> This calculation assumes that single strike SELs < 150 dB do not accumulate to cause injury (Effective Quiet)

#NUM!

#NUM!

464

Notes (source for estimates, etc.)	
(This model was last updated January 26, 2009	
464 meters = 0.29 mile.	